## INTERNATIONAL SEARCH REPORT

PCT/GB2005/000412

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 G01N27/62 G01N30/72

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7-601N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

| C. DOCUM   | ENTS CONSIDERED TO BE RELEVANT  |                       |
|------------|---|-----------------------|
| Category ° | Citation of document, with indication, where appropriate, of the relevant passages          | Relevant to claim No. |
| Υ          | US 5 602 755 A (ASHE ET AL) 11 February 1997 (1997-02-11) cited in the application abstract | 1,2,<br>6-10,14       |
| А          | column 3, line 21 - column 5, line 7  | 3-5,<br>11-13         |
| Υ          | US 6 118 120 A (FENN ET AL)<br>12 September 2000 (2000-09-12)<br>column 1, lines 27-67      | 1,2,<br>6-10,14       |
| A          | column 3, line 43 - column 4, line 31   | 3-5,<br>11-13         |
|            | -/  |                       |
|            |   |                       |
|            |   |                       |

| X Further documents are listed in the continuation of box C.  | Patent family members are listed in annex.  |
|---|---|
| *A* document defining the general state of the art which is not considered to be of particular relevance  *E* earlier document but published on or after the international filing date  *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  *O* document referring to an oral disclosure, use, exhibition or other means  *P* document published prior to the international filing date but later than the priority date claimed | <ul> <li>*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</li> <li>*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>*Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>*&amp;* document member of the same patent family</li> </ul> |
| Date of the actual completion of the International search   | Date of mailing of the international search report 29/04/2005   |
| 14 April 2005  Name and mailing address of the ISA  | Authorized officer  |
| European Patent Office, P.B. 5818 Patentlaan 2<br>NL – 2280 HV Rijswljk<br>Tel. (+31–70) 340–2040, Tx. 31 651 epo nl,<br>Fax: (+31–70) 340–3016   | Filipas, A  |

2

## INTERNATIONAL SEARCH REPORT

PCT/GB2005/000412

| ation) DOCUMENTS CONSIDERED TO BE RELEVANT  | 1017 0020037 000412  |  |  |
|---|--|--|--|
| Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.  |  |  |
| EIDE I ET AL: "Resolution of GC-MS data of complex PAC mixtures and regression modeling of mutagenicity by PLS" ENVIRONMENTAL SCIENCE AND TECHNOLOGY, AMERICAN CHEMICAL SOCIETY, EASTON, PA, US, vol. 35, no. 11, June 2001 (2001-06), pages 2314-2318, XP002178703 ISSN: 0013-936X cited in the application abstract                                     | 2,7-10,<br>14  |  |  |
| the whole document  | 1,3-6,<br>11-13  |  |  |
| MASAMICHI YAMASHITA ET AL: "ELECTROSPRAY ION SOURCE. ANOTHER VARIATION ON THE FREE-JET THEME" JOURNAL OF PHYSICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, US, vol. 88, no. 20, 1 September 1984 (1984-09-01), pages 4451-4459, XP000612677 ISSN: 0022-3654 abstract page 4458, left-hand column, last paragraph - right-hand column, paragraphs FIRST, FULL | 1,6  |  |  |
| US 2003/201387 A1 (HARTLEY FRANK T ET AL) 30 October 2003 (2003-10-30) page 1, paragraph 3 - paragraph 5 page 2, paragraph 26   | 1,6  |  |  |
| DE 100 06 401 A1 (VOLKSWAGEN AG) 16 August 2001 (2001-08-16) the whole document   | 1  |  |  |
| US 5 753 910 A (GOURLEY ET AL) 19 May 1998 (1998-05-19) abstract column 1, line 15 - line 45  | 1,6  |  |  |
|   | EIDE I ET AL: "Resolution of GC-MS data of complex PAC mixtures and regression modeling of mutagenicity by PLS" ENVIRONMENTAL SCIENCE AND TECHNOLOGY, AMERICAN CHEMICAL SOCIETY, EASTON, PA, US, vol. 35, no. 11, June 2001 (2001-06), pages 2314-2318, XP002178703 ISSN: 0013-936X cited in the application abstract the whole document  MASAMICHI YAMASHITA ET AL: "ELECTROSPRAY ION SOURCE. ANOTHER VARIATION ON THE FREE-JET THEME" JOURNAL OF PHYSICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, US, vol. 88, no. 20, 1 September 1984 (1984-09-01), pages 4451-4459, XP0000612677 ISSN: 0022-3654 abstract page 4458, left-hand column, last paragraph - right-hand column, paragraphs FIRST, FULL  US 2003/201387 A1 (HARTLEY FRANK T ET AL) 30 October 2003 (2003-10-30) page 1, paragraph 26  DE 100 06 401 A1 (VOLKSWAGEN AG) 16 August 2001 (2001-08-16) the whole document  US 5 753 910 A (GOURLEY ET AL) 19 May 1998 (1998-05-19) abstract |  |  |

2

## **INTERNATIONAL SEARCH REPORT**

information on patent family members

PCT/GB2005/000412

| Patent document cited in search report |      | Publication date | Patent family member(s) |            | Publication date |            |
|--|------|------------------|-------------------------|------------|------------------|------------|
| US 5602755                             | A    | 11-02-1997       | AU                      | 709024     | B2               | 19-08-1999 |
|  |      |                  | AU                      | 5678096    | Α                | 22-01-1997 |
|  |      |                  | CA                      | 2225363    | A1               | 09-01-1997 |
|  |      |                  | DE                      | 69620238   | D1               | 02-05-2002 |
|  |      |                  | DE                      | 69620238   | T2               | 12-09-2002 |
|  |      |                  | EP                      | 0871936    | A1               | 21-10-1998 |
|  |      |                  | JP                      | 11509313   | T                | 17-08-1999 |
|  |      |                  | NO                      | 976003     | Α                | 23-02-1998 |
|  |      |                  | WO                      | 9701142    | A1               | 09-01-1997 |
| US 6118120                             | A    | 12-09-2000       | US                      | 5581080    | Α                | 03-12-1996 |
|  |      |                  | US                      | 5686726    | Α                | 11-11-1997 |
|  |      |                  | US                      | 5130538    |                  | 14-07-1992 |
|  |      |                  | AU                      | 5815590    |                  | 18-12-1990 |
|  |      |                  | CA                      | 2032490    |                  | 20-11-1990 |
|  |      |                  | ΕP                      | 0434792    |                  | 03-07-1991 |
|  |      |                  | JP                      | 4501468    |                  | 12-03-1992 |
|  |      |                  | WO                      | 9014148    | A1<br>           | 29-11-1990 |
| US 200320138                           | 7 A1 | 30-10-2003       | US                      | 2003071223 |                  | 17-04-2003 |
|  |      |                  | EP                      | 1412061    |                  | 28-04-2004 |
|  |      |                  | JP                      | 2005505100 | T                | 17-02-2005 |
|  |      |                  | WO                      | 03001219   |                  | 03-01-2003 |
|  |      |                  | US                      | 2003038245 |                  | 27-02-2003 |
|  |      |                  | US                      | 2003201389 |                  | 30-10-2003 |
|  |      |                  | US<br>US                | 2004223852 |                  | 11-11-2004 |
|  |      |                  |                         | 2004229104 |                  | 18-11-2004 |
| DE 10006401                            | A1   | 16-08-2001       | NONE                    |            |                  |            |
| US 5753910                             | Α    | 19-05-1998       | NONE                    |            |                  |            |